

**Remarks**

The Office Action issued May 20, 2008 has been carefully reviewed, and these remarks are responsive thereto. Claims 1, 8, 9, 13, 20, 21, 25, 26, 28-30 and 32 are pending herein. By this Amendment, independent claims 1, 13, 26 and 30 have been further amended to recite a composition of the "organic film," an atomic number range of the "rare gas" and, in accordance with examples 1 ( $58^\circ$ ), 4 ( $22^\circ$ ), 6 ( $58^\circ$ ), 7 ( $38^\circ$ ) and 8 ( $58^\circ$ ), a "water contact angle" range of  $58^\circ$  or less.

The organic film is discussed at page 8, line 34 to page 9, line 1 as comprising silicon, carbon, hydrogen and oxygen.

The atomic number of Argon and of rare gases of higher atomic number is discussed at page 10, lines 27-31. By way of example, argon is identified as well as krypton or xenon with higher atomic numbers.

The tables showing contact angles of  $58^\circ$  or less are found for examples 1, 4, 6, 7 and 8 at pages 16, 20 and 21, respectively.

In the Office Action of May 20, 2008, claims 1, 8, 9, 26 and 28-29 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0123240 to Gallagher et al. (hereinafter, Gallagher) in view of U. S. Patent Application Publication No. 2002/0000415 to Ross (hereinafter, Ross) and U.S. Patent No. 6,420,088 to Angelopoulos et al.; and claims 13, 20-21, 25, 30 and 32 are rejected under §103(a) as being unpatentable over Ross alone.

The Examiner admits that Gallagher does not discuss the use of electron beams. Gallagher obtains a contact angle in excess of  $68^\circ$  if all examples of Tables 1 and 2 are considered (page 7 of Gallagher). Of course,  $68^\circ$  exceeds  $58^\circ$  by ten degrees.

The Examiner discusses the motivation to combine Gallagher with Ross as "both disclose processes of curing and modifying a silsequioxane layer in an atmosphere of argon/oxygen without the use of UV light and Ross further discloses that using the electron beam removes all moisture and contaminants from the surface of the silsequioxane layer and provides a surface treatment so the other layers will adhere to it." However, that motivation does not apply to

reducing a water contact angle known in the art as at least 68° (the actual range being from 68° to 103°) to “a water contact angle of 58° or less on the organic film.” Consequently, the combination of recited steps of each of independent claims 1, 13, 25 and 30, as further amended, patentably distinguish over Gallagher/Ross.

The Examiner further admits that Ross alone fails to teach the modifying step with a recited change in pressure yet urges: “It would have been obvious . . .to modify the conditions to be within the claimed range in order to remove the moisture and particles on the surface and to prepare it for subsequent layers especially absent any criticality in using the conditions in the claimed range.” The Examiner’s “result effective variable” analysis is rendered moot by Ross’s lack of disclosure of a water contact angle.

Angelopoulos et al. ‘088 does not make up for the deficiencies of Galagher/Ross. For example, the ‘088 reference fails to discuss water contact angle.

Consequently, Applicant respectfully requests that the application be passed to issue. In view of the amendments and remarks herein, Applicant respectfully requests reconsideration and withdrawal of the rejections set forth in the Office Action of May 20, 2008 and that claims 1, 8, 9, 13, 20, 21, 25, 26, 28-30 and 32 be allowed.

Applicant appreciates the courtesies extended by the Examiner of a personal telephonic interview in the past. Applicant encourages the Examiner to contact the undersigned counsel for Applicant or Mr. Makuch at the indicated telephone number to discuss the claims as amended, if the Examiner disagrees with Applicant’s position, or finds new art during a new search.

**U.S. Serial No.: 10/727,038  
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If any additional fees under 37 C. F. R. §§ 1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300, Order No. 033082M185.

Respectfully submitted,

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